

WHAT IS CLAIMED IS:

1. A parking assisting device comprising:

means for setting a reference of a turning position of a vehicle;

means for detecting a turning position of a vehicle based on the reference; and

means for notifying a driver of parking assisting information concerning a target guiding position based on the detected turning position of a vehicle,

wherein the parking assisting information comprises two kinds of information with forms different from each other provided in any two states among three states consisting of a state in which the vehicle has reached the target guiding position and states in which the vehicle is in front of and behind the target guiding position, the two kinds of information informing the driver of at least two states among the three states.

2. A parking assisting device according to claim 1,

wherein the parking assisting information comprises first information and second information provided in the states in which the vehicle is in front of and behind the target guiding position, the first information and the second information with forms different from each other informing the driver of three states consisting of the state in which the vehicle has reached the target guiding position and the states of positions in which the vehicle is in front of and behind the target guiding position.

3. A parking assisting device according to claim 2,

wherein the parking assisting information includes third information to

be notified in the state in which the vehicle has reached the target guiding position.

4. A parking assisting device according to claim 3,

wherein the first information, second information and third information indicate that the vehicle is approaching, has gone beyond and has reached the target guiding position, respectively.

5. A parking assisting device according to claim 3,

wherein the first information, second information and third information indicate that the vehicle is required to move forward, is required to move backward and is required to stop, respectively.

6. A parking assisting device according to claim 2,

wherein the parking assisting information consists of sounds, and the first information and second information have elements specifying sound at least one of which is different between the first and second information and at least another one of which changes based on a vehicle position with respect to the target guiding position.

7. A parking assisting device according to claim 1,

wherein the parking assisting information includes a brake operation guiding sound provided in a first position before the vehicle reaches the target guiding position.

8. A parking assisting device according to claim 7,

wherein the first position is selected based on an angular speed of the vehicle in a predetermined position before the vehicle reaches the first position.

9. A parking assisting device according to claim 7,
wherein the first position is selected based on interrelation between a
turning position of the vehicle and an angular speed of the vehicle in the
turning position.

10. A parking assisting device according to claim 7,
wherein the first position is selected by learning based on past data.

11. A parking assisting device comprising:
means for setting a reference of a turning position of a vehicle;
means for detecting a turning position of a vehicle based on the
reference; and
means for notifying a driver of parking assisting information concerning
a target guiding position based on the detected turning position of a vehicle,
wherein the parking assisting information includes a brake operation
guiding sound that is provided in a first position before the vehicle reaches the
target guiding position.

12. A parking assisting device according to claim 11,
wherein the first position is selected based on an angular speed of the
vehicle in a predetermined position before the vehicle reaches the first
position.

13. A parking assisting device according to claim 11,
wherein the first position is selected based on an interrelation between
a turning position of the vehicle and an angular speed of the vehicle in the
turning position.

14. A parking assisting device according to claim 11,

wherein the first position is selected by learning based on past data.

15. A parking assisting device according to claim 6,

wherein the parking assisting information is of light instead of sound.

16. A parking assisting device according to claim 11,

wherein the parking assisting information is of light instead of sound.

17. A parking assisting device according to claim 6,

wherein the parking assisting information is of vibration instead of sound.

18. A parking assisting device according to claim 11,

wherein the parking assisting information is of vibration instead of sound.